



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

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February 27, 2014

Ms. Patty Marajh-Whittemore Remedial Project Manager ITP Gulf Coast Naval Facilities Engineering Command Southeast Attn: AJAX Street, Building 135N P.O. Box 30A Jacksonville, FL 32212-0030

RE: Draft Feasibility Study Addendum (FSA) for Operable Unit (OU) 2 (Sites 11, 12, 25, 26, 27, and 30), Naval Air Station Pensacola, Pensacola, Florida

Dear Patty:

The Department has reviewed the Draft Feasibility Study Addendum (FSA) for Operable Unit (OU) 2 (Sites 11, 12, 25, 26, 27, and 30), Naval Air Station Pensacola, dated November 2013 (received electronically November 22, 2013), prepared by AGVIQ-CH2M HILL Constructors, Inc. Joint Venture III. I have the following comments on the report:

- (1) Figure 2-1, which is supposed to depict soil thickness contours, is not very clear. There are many numbers in red, which should represent the measurements of soil cover in feet, that are written in values that denote measurements to one one-thousandths of a foot. It seems unlikely that the Navy's contractor could measure to that precision. Also, many of the values on the figure are covered up by other lines, making them unreadable. Lastly, there are various areas pointed to and bounded by a yellow border that are not specified as to what those areas denote. Are these areas proposed for additional cover perhaps? Generally, I found the figure confusing as to what is being depicted and how it figures into the FS Addendum.
- (2) If I am reading Figure 2-1 correctly, the seven (7) areas of soil excavation that were originally identified for excavation in the previous FS and Remedial Design are all located in areas that have insufficient cover. This could mean that the soil samples collected from 0 to 2 feet below land surface in those areas had waste incorporated into the samples. Figure 2-1 would also indicate that there is a large area of no soil cover in

Ms. Marajh-Whittemore Draft Feasibility Study Addendum Operable Unit 2, Sites 11, 12, 25, 26, 27 and 30 Page 2 of 4 February 27, 2014

the yellow bordered area depicted as Area 5, where there are lots of values depicting 0.000 feet of soil cover. This could mean waste is present at the surface and the hazards of that waste, whether or not chemical or asbestos related, may be unknown. Ensuring there is an adequate soil cover would seem a reasonable way to reduce risks of direct exposure to those wastes.

(3) The previous FS for Operable Unit 2 provides the following:

2.3.1 Site 11 — North Chevalier Field Disposal Area

The source of contamination was identified to be a former landfill, where trenching revealed evidence of a "seam" of blackened debris at the water table. This oily material contained finely corroded bits of metal and other debris.

If this seam of blackened debris is the source of groundwater contamination, the placement of an impermeable cap over the waste might not have much of an effect as the seam is already at the water table. Tidal fluctuations, seasonal water table fluctuations, etc. would be leaching contaminants from the seam regardless of whether a permeable soil cover or an engineered impermeable cap is installed over the waste. It would seem if that layer is causing groundwater contamination, the only way to keep contaminants from leaching out would be to remove it and dispose of it elsewhere. Also, monitoring groundwater contamination exiting the landfill to ensure that it is not adversely affecting surface water or if it is, addressing it with a remediation system, would seem to be a reasonable means of addressing that contamination.

(4) I am not sure what this modification to the RAOs, listed on pages 1-1 and 1-10 of the FSA means:

For subsurface soil outside the boundaries of Site 11, remove COCs at concentrations that exceeding Florida's default soil cleanup target levels for groundwater leachability.

Within the boundaries of the Site 11 landfill, prevent human exposure(s) to buried wastes and demonstrate through the use of acceptable monitoring methods that such wastes and/or subsurface soils are not resulting in migration of COCs to groundwater at levels greater than pertinent Florida groundwater cleanup target levels.

Would this indicate that subsurface soils outside the arbitrary boundary of Site 11 depicted on Figure 1-2 have to be excavated? Also, as groundwater has already been

Ms. Marajh-Whittemore Draft Feasibility Study Addendum Operable Unit 2, Sites 11, 12, 25, 26, 27 and 30 Page 3 of 4 February 27, 2014

impacted by buried waste and if the seam at the water table that I discuss above is continuing to leach contaminants, how is the Navy going to demonstrate through acceptable monitoring methods that the wastes are not resulting in groundwater contamination?

(5) There are other parts of the FSA that are awkwardly worded, such as:

LUCs would prevent potential future exposure to these COCs through maintenance and site inspections to ensure cover integrity and prohibiting unrestricted land use at the site.

The Land Use Controls, once implemented, need to prohibit digging into or modifying the cover over the landfill (unless authorized by Navy, EPA and FDEP) as well as prohibiting certain land uses. I am not sure what "prohibiting unrestricted land use" means. Also, maintenance and site inspections are just a way to make sure the LUCs are being complied with and are still in place and effective. The maintenance and site inspections of land use controls are not in themselves a means of protectiveness.

Compliance with state and federal ARARs by protection of groundwater from leaching of COCs in subsurface soil will be demonstrated by MNA, which is the 2008 OU 2 remedy for groundwater. Although soil has been exposed to the elements for many years (e.g., soil within the landfill boundary), groundwater will be monitored to ensure COCs in soil do not leach to groundwater at concentrations exceeding the groundwater cleanup target levels over time.

What does this mean? It would seem that the proposed remedy is guaranteed to fail as groundwater is already contaminated and wastes are proposed to be left in place under that remedy.

- (6) Please provide a discussion of the soil contamination that was originally proposed for excavation under the Remedial Design. The discussion should include a list of contaminants detected above action levels, their concentrations, where the contamination was located, and the relationship of that soil contamination to groundwater contamination detected above remedial action objectives.
- (7) In the part of the FSA concerning the cleanup of radiological wastes, please discuss the criteria the Radiological Affairs Safety Office used to determine cleanup levels of radium-226 and how their cleanup criteria met or exceeded EPA's cleanup requirements.

Ms. Marajh-Whittemore Draft Feasibility Study Addendum Operable Unit 2, Sites 11, 12, 25, 26, 27 and 30 Page 4 of 4 February 27, 2014

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If you have any questions regarding this letter, please contact me at (850) 245-8997.

Sincerely,

David P. Grabka, P.G. Remedial Project Manager DoD and Brownfields Partnerships

Waste Cleanup Program

CC: Greg Campbell, NAS Pensacola Tim Woolheater, EPA Region 4 Gerry Walker, Tetra Tech, Tallahassee Allison Harris, Ensafe, Memphis, TN

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